

REMARKS

In order to emphasize the patentable distinctions of applicant's invention over the prior art, claim 1, as well as claims 2 – 7 and 9 - 10 dependent thereon, and claim 11, as well as claims 12 – 15 and 17 - 18 dependent thereon, have been amended to recite that the ready to eat vegetable yogurt and method of manufacturing same, has a pureed vegetable content ranging from 30 to 70 percent by weight. Inasmuch as the limitation of original claims 8 and 16 have been incorporated into currently amended claims 1 and 12, respectively, claims 8 and 16 have been canceled. In addition, claim 6 has been amended, for the sake of clarity, to replace a “semi-colon” with a “period”. Each of these amendments is clearly supported by the original specification; particularly at page 13, lines 11 – 16; page 14, lines 3 – 8; page 15, lines 1 – 2; page 16, lines 1 – 3; and page 18, lines 5 – 8.

The ready to eat vegetable yogurt required by amended claim 1, as well as claims 2 – 7 and 9 - 10 dependent thereon, comprises cooked pureed vegetables blended with plain yogurt (including active cultures of *Lactobacillus acidophilus*, *Lactobacillus casei*, *Lactobacillus reuteri* and *Bifidobacterium bifidum*, and natural additives to enhance flavor and taste). Upon being blended, the cooked pureed vegetable content present ranges from 30 to 70 percent by weight. Applicant's claims 1 – 7 and 9 - 10 require that the cooked pureed vegetables, plain yogurt with active cultures and additives be blended to form a homogeneous, uniform mixture of ready to eat vegetable yogurt. The blended yogurt product is stored at refrigeration temperatures until consumed. Advantageously, the cooked pureed vegetables remain unfermented when the vegetable yogurt is stored at refrigeration temperature.

In addition, applicant's amended claim 11, as well as claims 12 – 15 and 17 - 18

dependent thereon, provide a process comprising the steps of cooking selected vegetables one at a time or together, depending on the vegetable type, and cooling the cooked vegetables so as to prevent overcooking and preserve freshness and taste. In accordance with, applicant's claims 11 – 15 and 17 - 18, as amended, the cooked, and then cooled vegetables are mixed together to form a mixture. Claims 11 - 15 and 17 – 18, as amended, additionally require the steps of pureeing the mixture to form a smooth textured mixture; adding natural additives that enhance taste and flavor; and blending the cold yogurt mixture to produce a homogenous uniform mixture of ready to eat vegetable yogurt in which the cooked pureed vegetable content present ranges from 30 to 70 percent by weight. Applicant's claims 11 – 15 and 17 - 18 further require maintaining the ready to eat vegetable yogurt at refrigeration temperature until consumed, so as to preserve the freshness and taste of the cooked cooled pureed vegetables, and to prevent fermentation thereof by the active cultures of the yogurt.

Advantageously, the ready to eat vegetable yogurt called for by applicant's present claims 1 – 7 and 9 - 11 has a significant weight percentage of vegetables without the presence of preservatives or other non-natural additives. The resultant food product is highly nutritional, being packed with essential vitamins, minerals, and fibers contained by the vegetable component. Applicant's ready to eat vegetable yogurt is an all-natural product comprised of cooked pureed vegetables and yogurt. Since complete vegetables are used by applicant, all the natural nutritional values of the vegetable, including vitamins, minerals and fibers, are preserved. Advantageously, the ready to eat vegetable yogurt called for by applicant's present claims 1 – 7 and 9 – 11 does not call for the addition of any artificial additives or preservatives. Such additives or preservatives oftentimes deleteriously affect the taste and the nutritional properties

of food products. In addition, the method of manufacture called for by applicant's claims 11 – 15 and 17 - 18, as amended, requires that the cooked vegetables be cooled and pureed into a smooth mixture, so that the cooked and then cooled pureed vegetables are added to yogurt with active cultures to form a cold yogurt mixture. In accordance with present claims 11 – 15 and 17 - 18, the addition of purred vegetables is such that the vegetable content ranges from 30 to 70 percent by weight. Cooling of the vegetable pureed mixture is maintained even after the addition thereof to the yogurt. This procedure minimizes degradation of the nutrients contained by the vegetable component. A delicious food product is thereby produced, which has high nutritional value and extended nutritional stability.

The Examiner has rejected claims 1 – 18 under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent No. 61231958 to Hara, Japanese Patent No. 55007013 to Kazutada et al., Japanese Patent No. 3112454 to Masahiro et al., and Great Britain Patent No. 2294625 to Oliver. The Examiner has stated that Hara discloses a yogurt comprising a vegetable (Hara, abstract). In addition, the Examiner has indicated that Kazutada et al. discloses a yogurt comprising vegetables (Kazutada et al., abstract). Masahiro et al. and Oliver are likewise said to disclose a yogurt comprising vegetables (see Masahiro et al., abstract and Oliver, abstract). While acknowledging that applicant's claims differ as to the recitation of specific cultures and percents, the Examiner has indicated that, as shown by Hara, Kazutada et al., Masahiro et al., or Oliver, the disclosed yogurt cultures are well-known in the art and used for their art-recognized purpose; that once the art has recognized the addition of vegetable products to yogurt, the use and manipulation of types of vegetables and percents employed by applicant make the ingredient amounts claimed no more than a matter of choice, dictated by preference, and well-within the

skill of the art. Applicant respectfully disagrees.

Applicant respectfully submits that the weight percent of cooked pureed vegetables required by applicant's present claims 1 – 7, 9 – 15 and 17 - 18 is not merely a matter of choice, dictated by preference, but is a necessary prerequisite to provision of an all natural vegetable yogurt product having significant nutritional value. Such an all natural, nutrient enriched food product has not been accomplished by any of the prior art workers, including Hara, Kazutada et al., Masahiro et al., or Oliver. For quite some time the art has struggled to devise an all natural food product containing both vegetables and yogurt and wherein (i) a significant amount of vegetables are blended with yogurt to produce a highly nutritional food product; and (ii) the blended vegetable-yogurt food product experiences minimal breakdown or depletion of the vegetable component's nutritional properties. Yet up until the time of applicant's invention, no all-natural, ready to eat vegetable yogurt product having (i) a cooked pureed vegetable content ranging from 30 to 70 percent by weight; and (ii) the capacity to minimize nutritional degradation of the vegetable component's nutritional properties has been proposed by any prior art worker, including Hara, Kazutada et al., Masahiro et al., or Oliver. The prior art inventions and their attendant disadvantages are discussed at pages 1 – 12 of applicant's specification.

In fact, prior art workers, including Hara, Kazutada et al., Masahiro et al., and Oliver, have taught that products which combine yogurts with vegetables are vulnerable to flavor degradation. This phenomenon, which inherently results from degradation of the vegetable component in such yogurt-vegetable blends, also produces a marked drop in the products nutritional values, and yields a commercially unattractive product. (see, for example, Oliver, pg. 1, second paragraph).

Hara discloses a process for utilizing fermented bean paste (MISO) and / or fermented milk product, such as yogurt (NYUFU) as an agent to retard the freeze-denaturation of a food product. In particular, Hara discloses that MISO and / or NYUFU is to be mixed with a food product, such as cereal, potato, cake, bean, fish, shellfish, meat, egg, vegetable, seasoning, cooked food, algae, etc., of the normal state. Hara discloses that 100 pts. food product is mixed with ≥ 3 pts. of MISO and/ or NYUFU; this pts ratio would result in a paste-like food product, not a ready to eat vegetable yogurt. Moreover, Hara discloses that wherein a seasoning, such as sugar, oil and fat, etc., is added to the food product, a mixture of ≥ 1 pt. of MISO or NYUFU. The small amount of MISO or NYUFU added by Hara functions as an agent to retard the freeze-denaturation of the food product. Clearly, the product produced by Hara is not a ready-to-eat yogurt product. Rather, Hara's food product is appointed for exposure to freezing conditions, not immediate consumption; the object of the Hara's minimal MISO addition is to retard freeze-denaturation, which typically occurs during the thawing process after a food product undergoes freezing. Significantly, the amount of vegetable to MISO (or NYUFU) ratio in Hara's shows that the resultant food product is basically a vegetable having a minimal amount of MISO (or NYUFU); the latter ingredient functions merely as an agent to retard freeze-denaturation of the food product, while at the same time preserving the taste of vegetable component during the freezing and thawing process. Any food product produced from the Hara teaching would not be a ready to eat vegetable yogurt; and it would clearly not contain 30 to 70 weight percent of cold pureed cooked vegetables, as is required by applicant's claims 1 – 7, 9 – 15 and 17 – 18, as amended.

Accordingly, reconsideration of the rejection of claims 1 – 7, 9 – 15 and 17 – 18 under

35 U.S.C. §103(a) as being unpatentable over Hara is respectfully requested.

Oliver discloses a yogurt that comprises (i) a rosaceous fruit, preferably one or more of apple, pear, plum and / or damson; and (ii) one or more vegetables, herbs, and/or spices, the weight percent of the vegetables to be used being within the range of 12 to 20 weight percent and, in particular, 16 weight percent. The object of the Oliver process is production of a vegetable type yogurt that incorporates a rosaceous fruit, which acts as preservative for the yogurt and vegetable food product. Specifically, the Oliver food product contains (i) a rosaceous fruit, (ii) a vegetable, and (iii) herbs or spices. The yogurt disclosed by Oliver also contains up to 12% by weight sugar addition. Oliver teaches (i) that vegetables, when added, can comprise one or more of celery, tomato, beetroot, courgette, pepper, marrow, onion, leeks, parsnips, swede, carrots, beans and /or potato; (ii) that the amount of the vegetable component present should range from 12 to 20 percent by weight and, in particular, 16 weight percent. The product taught by Oliver provides a 12 to 20 weight percent range for the addition of the vegetable, which affords significantly lower nutritional value than the product called for by amended claims 1 – 7, 9 – 15 and 17 - 18, which require that the content of the vegetable component be present in an amount ranging from 30 to 70 weight percent.

Notwithstanding the low percentage of vegetable content in his product, Oliver teaches that preservatives such as potassium sorbate should be added to his yogurt-vegetable blend. Clearly, additions of preservatives, gelling agents, and the like, tend to undermine the very premise of an all-natural food product. On the other hand, applicant's claims 1 – 7, 9 – 15 and 17 - 18, as amended, call for an all-natural, ready-to-eat vegetable yogurt that does not require the addition of preservatives, and other artificial additives. Such an all-natural, nutrient enriched food product has

not been proposed or created by any prior art worker, including Hara, Kazutada et al., Masahiro et al., or Oliver.

Oliver discloses the addition of a preservative to the food product, which merely contains 12 – 20 weight percent of vegetable content. Hara discloses modifying a vegetable food product by adding thereto a small amount of yogurt. Although Hara does not disclose the addition of preservatives, Hara is primarily concerned with ~~freezing~~ the food product, not preparing it for immediate consumption or storage at normal refrigeration temperatures. In contrast to the teaching of these prior art workers, wherein a blend containing a large amounts of vegetables (e.g. 97-99 %) uses yogurt as preservative to retard the freeze-denaturation of a food (Hara), or a blend containing a small amount of vegetables (e.g. 12-20%) utilizes rosaceous fruit, together with a preservative such as potassium sorbate, to prevent degradation of the blend, applicant utilizes a blend that contains 30 to 70% pureed vegetables, which are cold blended with yogurt, thereby avoiding the need for addition of preservatives to a blend having high nutritional value and extended nutritional stability.

Accordingly, reconsideration of the rejection of claims 1 – 7, 9 – 15 and 17 – 18 under 35 U.S.C. §103(a) as being unpatentable over Oliver is respectfully requested.

Kazutada et al. discloses a process wherein finely cut or ground vegetables, extracts, juices, and heated or cooked vegetables are added to yogurt before or after the fermentation. The purpose of the Kazutada et al. process is to prepare a yogurt that contains vegetables having softened fermentation odor and improved flavor, by adding vegetables to the yogurt during the preparation step. (Kazutada et al., abstract). The object of the process is to soften fermentation order and improve flavor of the vegetables by adding the vegetables to the yogurt during the preparation step.

The vegetables in Kazutada et al. are added to one or both layers of yogurt and a jelly is prepared, using a gelatinizing agent. Vegetable fermentation is required by the Kazutada et al. process. This vegetable fermentation produces a food product that exhibits properties significantly different from the food product of amended claims 1 – 7, 9 – 15 and 17 - 18, which does not exhibit vegetable fermentation. Fermentation of the vegetables causes a chemical change in the vegetable, resulting in an enzymatic transformation of organic substrates. This chemical change reduces the nutritional value of the product's vegetable content. Kazutada et al. discloses the addition of vegetables to yogurt during or prior to fermentation. In addition, Kazutada et al. requires the addition of a gelatinizing agent, presumably to prevent separation of the yogurt-vegetable mixture. Kazutada et al. does not disclose or suggest a ready-to-eat vegetable food product having 30 to 70 weight percent of cold pureed vegetable content in a blend that contains a yogurt (soy or milk), as required by applicant's claims 1 – 7, 9 – 15 and 17 - 18.

Accordingly, reconsideration of the rejection of claims 1 – 18 under 35 USC §103(a) as being unpatentable over Kazutada et al. is respectfully requested

Like Kazutada et al., Masahiro et al. discloses a process for formulating a vegetable food product comprising the mixing of vegetables, yogurt and a gelling agent. The Masahiro et al. process provides that the gelling agent may be carrageenan, agar, gelatin, gellan gum, pectin, canthan gum or a mixture thereof. The objective of the Masahiro et al. process is to suppress the grassy smell of vegetables and improve the taste and flavor by mixing together vegetables, yogurt and a gelling agent. Like Kazutada et al., Masahiro et al. teaches the addition of a gelling agent to the food product. Clearly, Masahiro et al. does not disclose or suggest a ready-to-eat vegetable food product wherein cold pureed vegetables are added to a yogurt (soy or milk) to produce a ready-to-

eat food product having vegetable content present in the amount of 30 to 70 weight percent, as required by amended claims 1 – 7, 9 – 15 and 17 - 18.

Accordingly, reconsideration of the rejection of claims 1 – 18 under 35 USC §103(a) as being unpatentable over Masahiro et al. is respectfully requested.

Notwithstanding art-perceived need for an all natural vegetable food product with high vegetable content that avoids degradation of the vegetable content's nutritional properties, no all-natural, ready-to-eat vegetable yogurt product having 30 to 70 weight percent vegetable content has, as yet, been proposed. In contrast to the teachings of the cited references, applicant has surprisingly discovered that combining together (i) yogurt and (i) cold, pureed and cooked vegetables so that the mixture has a vegetable content ranging from 30 to 70 percent by weight yields a stable, all-natural, food product packed with nutritional value. Surprisingly, this ready-to-eat vegetable-yogurt food product, and its method of manufacture, as called for by applicant's present claims 1 – 7, 9 – 15 and 17 - 18 exhibits extended nutritional stability. The addition of a relatively large amount of pureed vegetables, as called for by applicant's claims 1 – 7, 9 – 15 and 17 - 18, is carried out under cold conditions, so that degradation of vegetable nutrients is minimized. Clearly, addition of cold pureed vegetables to a yogurt in such large amounts is not disclosed or suggested by prior art workers, including Hara, Kazutada et al., Masahiro et al., or Oliver. Moreover, the addition of cold pureed vegetables to produce a yogurt-vegetable blend having vegetable content in the amount of 30 to 70 weight percent is not taught or suggested by any combination of the art applied. This blended quantity of cold pureed vegetable content, which affords higher nutritional content and prolonged nutritional shelf life, is not merely a matter of choice; but represents, instead, a key feature of the blend called for by applicant's


claims. When compared to any product produced from the teachings of the cited references, the ready-to-eat vegetable-yogurt food product called for by applicant's claims has higher nutritional value and extended nutritional stability.

Accordingly, reconsideration of the rejection of claims 1 – 7, 9 – 15 and 17 – 18 under 35 USC §103(a) as being unpatentable over Hara, Kazutada et al., Masahiro et al., or Oliver is respectfully requested.

CONCLUSION

In view of the remarks set forth above, it is respectfully submitted that the present application is in allowable condition. Reconsideration of the rejection of claims 1 – 7, 9 – 15 and 17 – 18, and their allowance, are earnestly solicited.

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